

(No Model.)

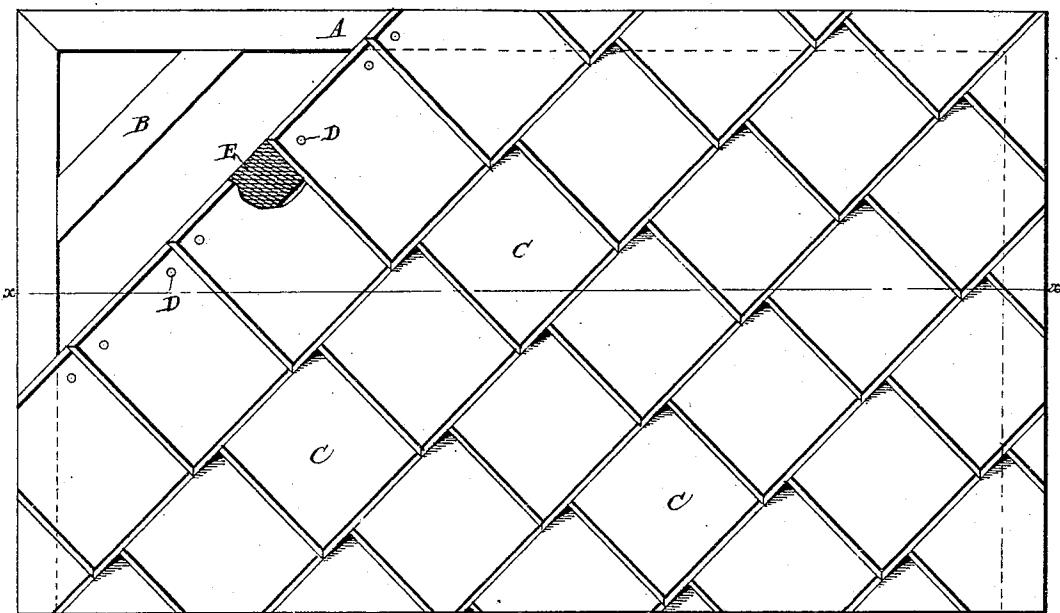
H. D. CORDRAY.

Slate Roofing.

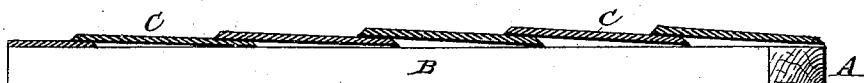
No. 242,510.

Patented June 7, 1881.

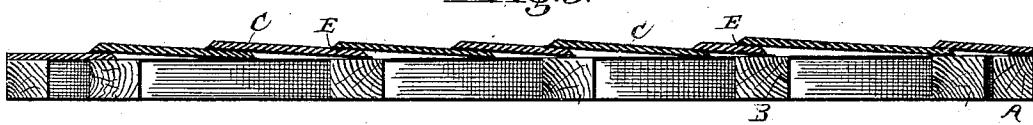
—Fig. 1.



—Fig. 2.



—Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY D. CORDRAY, OF NEWARK, OHIO.

SLATE-ROOFING.

SPECIFICATION forming part of Letters Patent No. 242,510, dated June 7, 1881.

Application filed April 6, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. CORDRAY, a citizen of the United States, residing at Newark, in the county of Licking and State of Ohio, have invented certain new and useful Improvements in Slate-Roofing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it applies to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The present invention has reference to that class of slate-roofing in which rectangular slates are laid in oblique courses. In this style of roofing, as heretofore known, the slates present inclined courses only after having been laid, because they are put down transversely or across the roof, so as to cause every slate of a transverse row to overlap two slates of a next preceding row.

The above system of laying slates is defective, because the ordinary roofing or sheathing boards cannot be dispensed with, the same being necessary for enabling the slates to be properly supported and secured. The slates, moreover, cannot be laid and secured with the same facility and dispatch as in the case where they are laid down in oblique courses, running from the eaves to the ridge-pole, or vice versa.

My invention is designed to carry out the last-mentioned system of laying slates; and it consists in the construction of the roof-frame, and manner of laying and securing the slates, hereinafter described and claimed.

In the drawings, Figure 1 is a face view of a slate roof, one of the courses being left off to show the manner of securing the slates to oblique or diagonal stringers or laths of the roof-frame, and another slate broken away to show the cement bed on which the slates are laid. Fig. 2 is a section taken diagonally through one of the oblique courses of slates and frame having oblique stringers for supporting the slates. Fig. 3 is a cross-section taken through the line *x x* of Fig. 1.

The frame *A* of the roof is of any preferred form, and has the diagonal or oblique stringers or laths *B* secured thereto. These stringers are used without the sheathing-boards present in ordinary roofs for supporting the slates.

In the present instance slates *C*, of a rectangular form, are laid in oblique courses from the eaves to the ridge-pole of the roof. These

slates rest directly upon the diagonal stringers, and are secured thereto by means of screws or nails *D* and a cement or plaster bed, *E*, applied to the diagonal stringers.

The first course of slates is laid down, commencing at one of the lower corners of the roof-frame, the upper edges of the slates of this course being secured to the first diagonal stringer in the manner already stated, and then covered by the overlapping edges of the slates of the next succeeding course. It will thus be perceived that each diagonal stringer supports the edges of two courses of slates, and by securing the latter by screws and cement or plaster, as already stated, no intermediate support is required for the slates. The second course having been laid, the upper edges of the slates of this course are secured to the second diagonal stringer, and then the third course of slates is laid, and so on until the entire roof-frame is covered.

It will be manifest that the slates adjoining the eaves, sides, and ridge of a square roof must be cut or otherwise shaped so as not to project beyond the same.

The system of laying slates above described is very simple and effective, and a larger area of the slates is exposed than if the slates were laid down in transverse rows.

I am aware that roofing-slates have heretofore been laid in cement or plaster; but they have not, up to the date of my invention, been embedded in plastic cement laid on diagonal stringers of a roof-frame. This manner of applying the cement, together with an additional coating of cement placed between the overlapping and underlapping ends of each pair of slates of the same course, as is shown in Fig. 2, will form an effectual and weather-tight secure joint, so as to prevent the admission of air or water under the slates.

What I claim as my invention, and desire to secure by Letters Patent, is—

The roof-frame having diagonal stringers or supporting bars, and the rectangular slates laid in diagonal courses and secured to said diagonal stringers, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY D. CORDRAY.

Witnesses:

GEO. M. GRASSER,
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